

REMARKS

This Amendment is filed in response to the Office Action mailed on January 25, 2006. All rejections and objections are respectfully traversed.

Claims 1-32 and 34 to 38 are currently pending.

Claims 34 to 38 are added to better claim the invention.

Claims 2, 3, and 15 are allowed.

Claim Rjections - 35 USC § 112

At paragraphs 4-5 of the Office Action, claims 1-33 were rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 1, 4, and 16 recite “a method for converting a file access data structure from a first endianness to a second endianness” in the preamble and the body of the claim does not describe the preamble. Additionally claims 7 and 20 were rejected for the same reason.

Claims 1, 4, 7, 16, and 20 are currently amended and show the connection between the preamble and the elements of the claims.

At paragraph 8 of the Office Action, claims 4-6 were rejected under 35 U.S.C. §112, second paragraph, as being incomplete.

Applicant has amended claim 4, and now believes the claim is complete.

Applicant respectfully urges that claims 1-32 are allowable over the §112 rejection.

Drawings

Applicant files a new copy of the formal drawings. The drawings are a second copy of the original drawings filed with the application.

Claim Rejections – 35 USC § 101

At paragraphs 10-11 of the Office Action, claims 1-10 and 16-33 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter, specifically, directed to an abstract idea.

Claims 1, 2, 4, 7, 16, 20, 26, and 32 are amended to give structure to the claims.

Claim 33 is cancelled.

Applicant believes claims 1-10 and 16-32 are allowable over the 101 rejection.

Claim Rejections – 35 USC § 102

At paragraphs 12-13 of the Office Action, claim 1 was rejected under 35 U.S.C. §102 as being anticipated by Hotchkin, US Patent No. 5,727,218, Issued on march 10, 1998, hereinafter Hotchkin.

The present invention, as set forth in representative claim 1, comprises in part:

1. A method for converting a file access data structure from a first endianness to a second endianness by a processor, the method comprising the steps of:

identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure; and

performing the identified series of actions on the elements of the file access data structure to convert the file data structure from the first endianness to the second endianness.

By way of background, Hotchkin describes a file system with peripheral storage subsystems coupled together by fibre channel. Additionally, Hotchkin describes an apparatus for adapting fibre channel transmissions to and from an industry standard data bus. The apparatus reads one endian from one memory location and writes to another location as a different endian.

Applicant respectfully urges that Hotchkin does not describe Applicant's novel step of *identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure*. In further detail, Applicant's claimed invention uses *a descriptor look up table* to identify *a series of actions to perform on elements of the file access data structure* to convert the file access data structure from a first endianness to a second endianness. The *series of actions* include converting, copying, and converting linked. The different actions are described in the specification at page 14, line 25 to page 15, line 6, which states:

"The CONVERT operation identifier means that the byte swapping engine needs to convert that particular entry into the proper endianness. Other possible entries include, for example, COPY, which causes the byte swapping engine to simply copy the data and not to perform any byte swapping, and LINKED, which alerts the byte swapping engine that this entry is a linked or nested data structure. Linked data structures can also include additional linked data structures. Thus, to be complete the byte-swapping of a data structure, several levels of nested data structures may need to be operated upon. For nested data structures, the byte swapping engine will look up the appropriate descriptor table entry defining the nested element and perform the appropriate actions as defined in that table entry on the nested data structure."

In contrast, Hotchkin does not describe *a descriptor look up table* that allows different actions to be applied to different file access data structures. Hotchkin only de-

scribes reading from one location and writing with a different endian at a different location.

Accordingly, Applicant respectfully urges that the Hotchkin patent is legally precluded from anticipating the claimed invention under 35 U.S.C. § 102 because of the absence from the Hotchkin patent of Applicant's *identifying, from a descriptor look up table, a series of actions to perform on elements of the file access data structure.*

At paragraph 14 of the Office Action, claims 4-14 were rejected under 35 U.S.C. §102 as being anticipated by Lindenstruth, US Patent No. 6,067,595, issued on May 23, 2000, hereinafter Lindenstruth.

The present invention, as set forth in representative claim 4, comprises in part:

4. A file system for converting elements of a file access data structure from a first endianness to a second endianness, the system comprising:
 - an input buffer, the input buffer storing the file access data structure with the first endianness to be converted;
 - a byte swapping engine, the byte swapping engine operative interconnected with a descriptor table, with the descriptor table listing a series of actions to perform when converting the file data structure from the first endianness to the second endianness;* and
 - an output buffer, the byte swapping engine placing the file access data structure with the second endianness in the output buffer after conversion.

By way of background, Lindenstruth describes an intelligent data bus interface having three independent data ports that provide simultaneous access stored on the memory. The interface allows for endianness conversion using a byte swap engine. The table

organizes the byte information based on a control field for write protect information and control a byte swap engine, and a master address.

Applicant respectfully urges that Lindenstruth does not describe Applicant's novel *a byte swapping engine, the byte swapping engine operative interconnected with a descriptor table, with the descriptor table listing a series of actions to perform when converting the file data structure from the first endianness to the second endianness*. In further detail, Applicant's claimed invention uses a *descriptor table listing a series of actions to perform when converting the file data structure*. As stated above, the table allows for different conversion operations to apply to different elements of the file structure. In contrast, Lindenstruth only describes a table with control information for write protect information and for using a byte swap engine. There is no disclosure in Lindenstruth of using the table to determine which action to apply for each element of the data structure.

Accordingly, Applicant respectfully urges that the Lindenstruth patent is legally precluded from anticipating the claimed invention under 35 U.S.C. § 102 because of the absence from the Lindenstruth patent of Applicant's *a byte swapping engine, the byte swapping engine operative interconnected with a descriptor table, with the descriptor table listing a series of actions to perform when converting the file data structure from the first endianness to the second endianness*.

Claim Rejections – 35 USC §103

At paragraphs 15-16 of the Office Action, claims 7-14 and 16-33 were rejected under 35 U.S.C. §103 as being unpatentable over Hotchkin, in view of Lindenstruth.

The present invention, as set forth in representative claim 7, comprises in part:

7. A method for converting a data structure from a first byte order to a second byte order by a processor, the method comprising the steps of:
 reading an element entry from *a descriptor table*;
 performing an action on an element of the data structure, the action being defined in the element entry read from the descriptor table to convert the data structure from the first byte order to the second byte order; and
 placing the element in an output buffer.

Applicant respectfully urges that Hotchkin and Lindenstruth, taken alone or in combination do not teach of Applicant's novel ***performing an action on an element of the data structure, the action being defined in the element entry read from the descriptor table to convert the data structure from the first byte order to the second byte order***. In further detail, Applicant's claimed invention uses *a descriptor table* to perform ***an action on an element of the data structure***. This allows the system to convert, copy, or convert/linked ***from the first byte order to the second byte order***. In contrast, both Lindenstruth and Hotchkin are silent concerning *a descriptor table* to ***perform an action on an element of the data structure ... to convert the data structure from the first byte order to the second byte order***. There is no suggestion or teaching in Lindenstruth and/or Hotchkin of using different methods to convert elements of the data structure.

Accordingly, Applicant respectfully urges that the Hotchkin patent and the Lindenstruth patent, either taken singly or taken in any combination are legally insufficient

to render the presently claimed invention obvious under 35 U.S.C. § 103 because of the absence in each of the cited patents of Applicant's claimed novel *performing an action on an element of the data structure, the action being defined in the element entry read from the descriptor table to convert the data structure from the first byte order to the second byte order.*

All independent claims are believed to be in condition for allowance.

All dependent claims are dependent from independent claims which are believed to be in condition for allowance. Accordingly, all dependent claims are believed to be in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



Shannen C. Delaney
Reg. No. 51,605
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500